

Claims:

This listing of claims replaces all prior versions and listings of claims in the Application:

1. **(Currently Amended)** A control system of an electronic instrument for metrological measurements, comprising:

a handling application operable to control the instrument;

at least one dynamic library associated with the handling application, the handling application operable to identify, through the dynamic library, one or more remote electronic instruments in a network of electronic instruments including the instrument through corresponding certification codes uniquely associated with each of the one or more remote electronic instruments; and

a control application activated through the dynamic library and operable to verify integrity of said handling application, said control application operable to generate a certification code for the handling application in response to verifying that the integrity of the handling application is maintained,

wherein the control application is operable to determine, through the identification of the one or more remote electronic instruments through corresponding certification codes, a variation of at least one handling application associated with one of the instruments in the plurality of electronic instruments, and

wherein the control application is operable to authenticate the handling application including the variation.

2. **(Previously Presented)** The control system according to claim 1, wherein said code is associated with a stamp comprising an issuing date of said stamp, a reference code of the metrological measurement instrument, and a barcode corresponding to said code.

3. **(Original)** The control system according to claim 1, wherein said control application and said handling application are communicably coupled via a network.

4. **(Canceled).**

5. (Previously Presented) The control system according to claim 1, wherein said dynamic library is locally stored.

6. (Previously Presented) The control system according to claim 1, wherein said dynamic library is situated in said central processing unit.

7. (Previously Presented) The control system according to claim 1, wherein said certification code is obtained using a cryptography algorithm.

8. **(Currently Amended)** A method for monitoring an electronic instrument for metrological measurements, comprising:

receiving information associated with a handling application for the instrument and locally stored, the handling ~~operation~~ application operable to control the instrument;

issuing a certification code associated with the handling application based on the information and operable to indicate that integrity of the handling application has been maintained; [[and]]

identifying, by the handling application through one or more dynamic libraries associated with the handling application, one or more remote electronic instruments in a network of a plurality of electronic instruments including the instrument through corresponding certification codes uniquely associated with each of the one or more remote electronic instruments;

determining, through the identification of the one or more remote electronic instruments through corresponding certification codes, a variation in at least one handling application associated with one of the instruments in the plurality of electronic instruments; and

authenticating, with the control application, the handling application with the variation.

9. (Original) The method according to claim 8, wherein producing a code includes processing said information using a cryptography algorithm.

10. (Original) The method according to claim 8, wherein the received information comprises an authenticity certificate of the handling application.

11. (Previously Presented) The method according to claim 8, wherein the received information comprises an acknowledgment code of said instrument.

12. (Original) The system of claim 1, wherein the controller is further operable to generate an alert in response to determining a violation of the integrity of the handling application.

13. (Original) The system of claim 12, wherein the violation comprises an unregistered modification of the handling application.

14. (Original) The system of claim 1, wherein the controller is further operable to prevent the handling application from operating in response to determining the violation.

15. (Original) The system of claim 1, wherein the controller is further operable to verify whether a certification associated with the handling application is valid.

16. (Original) The system of claim 15, wherein the certification is verified using a digital signature.

17. (Original) The method of claim 8, further comprising: determining a violation of the integrity of the handling application; and generating an alert in response to the violation.

18. (Original) The method of claim 17, further comprising preventing the handling application from operating in response to determining the violation.

19. (Original) The method of claim 8, further comprising: determining that a certification associated with the handling application is invalid; and generating an alert in response to the determining the invalidity.

20. (Original) The method of claim 8, further comprising generating a stamp indicating that the integrity of the handling application is verified.

21. (Original) The method of claim 8, wherein the information is received at the start of the handling application.

22. (Previously Presented) The method of claim 8, wherein the cryptography algorithm comprises one of a Secure Hash Algorithm (SHA) hashing algorithm or an RSA hashing algorithm.

23. **(Currently Amended)** A control system of an electronic instrument for metrological measurements, comprising:

a handling application operable to control the instrument, the handling application operable to identify, through a dynamic library, one or more remote electronic instruments in a network of electronic instruments including the electronic instrument for metrological measurements, through corresponding certification codes uniquely associated with each of the one or more remote electronic instruments; and

a control application operable to verify integrity of said handling application, said control application operable to generate a unique certification code for the handling application in response to verifying that the integrity of the handling application is maintained, determine, through the identification of the one or more remote electronic instruments through corresponding certification codes, a variation of at least one handling application associated with one of the instruments in the plurality of electronic instruments, and authenticate the handling application including the variation,

wherein the certification code is associated with a stamp comprising an issuing date of said stamp, a reference code of the metrological measurement instrument, and a barcode corresponding to said code.

24. **(New)** The method of claim 8, wherein authenticating, with the control application, the handling application with the variation comprises:

generating a control verification indicating that the variation in the handling application was prepared by the same producer as a previous version of the handling application with the variation;

generating a control verification that the variation is subsequent to the previous version of the handling application; and

generating a control verification that the variation is consistent with one or more other applications on the electronic instrument.